

Annual Performance Report

Environmental Cooperative Agreement

Pleasant Prairie Power Plant

Pleasant Prairie, Wisconsin

We Energies
June 2006

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SUMMARY

In February 2006, We Energies and the Wisconsin Department of Natural Resources (DNR) renewed the Environmental Cooperative Agreement for We Energies Pleasant Prairie Power Plant (P4). This renewed Agreement is a continuation of an Agreement first signed by both parties in 2001.

According to the Agreement, We Energies committed to providing a periodic performance report detailing both measurable environmental performance improvements and progress towards the specific goals of the P4 Environmental Cooperative Agreement. The required content of the annual performance report is outlined in Section XIV of the agreement.¹

The current report provides data covering both the 2004 and 2005 calendar years. Previous reports were provided at the end of each calendar year, and included information from the previous full reporting year, resulting in the reporting of summary information that was approaching being one year old.² As part of the renewed Agreement in early 2006, We Energies volunteered to prepare this report after the end of the first quarter of each year, capturing the quantitative performance results from the previous calendar year. Consequently, this report attempts to “catch up” by providing data for both the 2004 and 2005 calendar years.

INTRODUCTION

Wisconsin Electric Power Company (conducting business as We Energies) signed a voluntary Environmental Cooperative Agreement with the Wisconsin Department of Natural Resources (DNR) in February 2001. The agreement is specific to the Pleasant Prairie Power Plant located in Kenosha County, Wisconsin.³ This was a five year Agreement and could be renewed for an additional five years. The renewed Agreement was entered in February 2006 for another five years.

GOALS AND OBJECTIVES

The overall goal of the P4 Environmental Cooperative Agreement is to provide “an alternative method for the regulation of the environmental impacts.” Within this overall goal are several specific objectives, including:

- Baseline and periodic performance evaluations, including an examination of regulatory compliance
- Utilization of an environmental management system (EMS)
- Commitment to measurable superior environmental performance
- Informing and involving an interested persons group
- Periodic reporting of environmental performance (i.e., this report) and progress in implementing the Agreement

¹ In addition to this report, Wisconsin Energy Corporation provides a comprehensive corporate performance report following the Global Reporting Initiative (GRI) sustainability reporting guidelines for economic, social and environmental metrics. The most recent Wisconsin Energy Corporation report can be found on the internet at www.wec-performancereport.com. Additional information regarding the GRI guidelines can be found on the internet at www.globalreporting.org.

² The previous P4 Performance Report was prepared at the end of 2004, and contained quantitative data for the 2003 calendar year.

³ We Energies signed a second Environmental Cooperative Agreement encompassing all of its Wisconsin fossil-fueled generating plants in September 2002. Pleasant Prairie Power Plant is also included in this second Agreement.

- Operational flexibility, specifically focusing on;
 - Alternative monitoring and enhanced corrective action
 - Reduced reporting and decreased administrative expense
 - Permit streamlining
 - Coal combustion waste materials utilization.

Progress towards these objectives is discussed in the remainder of the report.

PERFORMANCE EVALUATION

Section XIV of the Agreement requires that We Energies annually perform and report to the DNR the results of a baseline performance evaluation. This is defined in section II.G of the Agreement as:

"A systematic, documented and objective review, conducted by or on behalf of the owner or operator of a facility, of the environmental performance of the facility, including an evaluation of compliance with the cooperative agreement and the provisions of Chapters 280 to 295 Wis. Stats. and rules promulgated under those chapters for which a variance is not granted under section 299.80(4) Wis. Stats."

The most recent environmental evaluation of P4 was conducted during November 7-11, 2005. This review addressed all environmental regulatory programs affecting the plant. A copy of the evaluation results and confirmation of any necessary corrective actions were provided to the DNR within 45 days of issuing the final audit report. With the exception of two major capital projects associated with storage tank upgrades, all corrective actions were completed within 90 days of the evaluation.

The evaluation was conducted by We Energies' compliance management staff. This compliance group is independent of the Fossil Operations business unit that operates the Pleasant Prairie Power Plant, and the group reports directly to the Vice President-Environmental for Wisconsin Energy Corporation.

The performance review followed the procedures outlined in the ASTM Standard E2107-00 (Standard Practice for Environmental Regulatory Compliance Audits). The ASTM standard addresses facility and auditor responsibilities, auditor qualifications, audit processes, records management and audit report preparation. The 2005 evaluation was comprised of interviews, records reviews and physical inspections of the facility.

ENVIRONMENTAL MANAGEMENT SYSTEMS

The P4 staff continues to use an environmental management system (EMS) based approach to overseeing the various environmental aspects of the plant. Based on the ISO 14001 standard, the key components of an EMS include the following:

Principal EMS Components	
Environmental Policy	
Environmental Planning	
Environmental Aspects	
Legal and Other Requirements	
Objectives and Targets	
Environmental Management Programs	
Implementation and Operation	
Structure and Responsibility	
Training and Awareness	

Communication EMS Documentation Document Control Operational Control Emergency Preparedness and Response Checking and Corrective Action Monitoring and Measurement Nonconformance and Corrective and Preventive Action Records EMS Audit Management Review
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Primary responsibility for maintaining the EMS resides with the P4 Cooperative Agreement System Team, or CAST. Specific EMS activity highlights of the CAST and staff at P4 during the reporting period include the following.

EMS Activity	
Training	<p>Targeted environmental training of P4 staff continued. Training courses addressing air, water, and solid waste and similar topics were presented in 2004 to individual work groups according to job responsibilities and the potential for having an effect on plant environmental performance. An updated environmental refresher training course was introduced to the plant in early 2005 and provided to all plant employees.</p> <p>Because of the increased number of new employees joining the business unit, expanded employee training for all new Fossil Operations employees was provided in 2005. All new employees receive an 8-hour initial environmental training program followed by any formal or on-the-job environmental training specific to their job responsibilities.</p>
Solid Waste Guidance	The P4 CAST maintained the plant's previously prepared Solid Waste Guide covering all identified solid waste streams in the plant. They continued efforts to identify new waste streams associated with any changes in plant operation, as well as the increased focus on Universal Wastes (e.g., batteries, electronics).
Contractor Reviews	Formal periodic environmental reviews of contractors and subcontractors constructing the \$325 million P4 Air Quality Control System (AQCS) continued in 2005. Having communicated We Energies' environmental expectations of contractors working at the plant, periodic environmental compliance audits of contractors are performed by We Energies environmental compliance management staff. Any findings requiring corrective action by the contractors are tracked to closure by the company.
On Site Inspections	The P4 CAST continued periodic on-site inspections of various systems at the plant. Complementing the annual performance reviews, these walk downs increase the environmental awareness of plant operating staff. Where necessary, corrective action is taken, and changes in procedures are recommended if appropriate.
Employee Information	The P4 CAST provided input to plant staff by posting articles in the plant newsletter, Watts New, and at plant staff meetings. A plant-specific intranet site was developed that provides links to approximately 40 plant environmental procedures, forms and related documents.

Communications	The P4 CAST has continued to facilitate the plant's communication and coordination with interested stakeholders. This included meetings with interested stakeholders. Additional information on communications with stakeholders and related activities are outlined in the Outreach section later in this report.
Recordkeeping	An internal guidance document was prepared identifying the filing system for all plant environmental documents, including plant monitoring records, internal and external communications, and regulatory reports.
Monitoring	<p>New air quality particulate matter (PM) monitors were installed at the plant in 2005. Certification tests in accordance with U.S. Environmental Protection Agency protocols were also performed.</p> <p>Continuous emission state-of-the-art mercury monitors are scheduled to be installed and certified in 2006.</p>

RESEARCH

We Energies continues to support and conduct environmental research at P4. This research consists of studies and funded collaborative research involving the Electric Power Research Institute (EPRI), the U.S. Department of Energy (DOE), the U.S. Environmental Protection Agency (EPA) and others. Research performed at the plant during 2004 and 2005 included the following.

- **Sorbent Capture of Mercury** – A DOE-sponsored study was conducted during late 2003 and continued into 2004 that examined the efficacy of both carbon and non-carbon sorbents in capturing mercury from power plant flue gases. This study involved the use of a pilot scale electrostatic precipitator to test sorbent behavior within a slip stream of flue gases.
- **Fine Particulate Health Study** – The Wisconsin Department of Administration through its contractor, Focus on Energy, the DOE-National Energy Technology Laboratory and EPRI funded a study in conjunction with the Harvard School of Public Health to determine the potential health effects associated with small particles present in or produced by power plant flue gases. Flue gases from P4 were diluted and then reacted with ozone and other common atmospheric components to simulate particulate transformation in the atmosphere. The transformed particulates were then used for exposure studies involving laboratory rats. The published results do not indicate any adverse health effects on test animals.
- **Mercury Oxidation Catalyst Reactor** – Starting in 2005, the plant has been the host site for a proprietary mercury oxidation catalyst reactor. Utilizing a specially formulated selective catalytic reactor (SCR) catalyst, this pilot project is seeking to determine if mercury can be oxidized in flue gas resulting from the combustion of Powder River Basin (PRB) coal. Typically PRB coal in combination with the ammonia in a SCR restricts the ability to oxidize and subsequently collect mercury from flue gases. If the specialty catalyst can oxidize the mercury, more of this water soluble form of mercury may be removed by the flue gas desulfurization (FGD) system being installed at P4.

Additional information on We Energies' mercury research can be found on the internet at www.we-energies.com/environment/mercury.

ENVIRONMENTAL PERFORMANCE

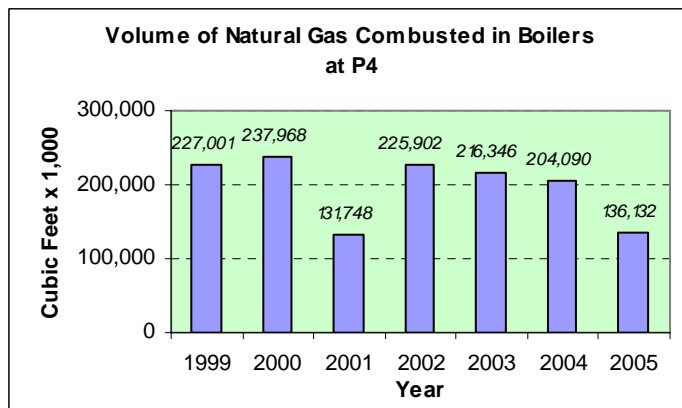
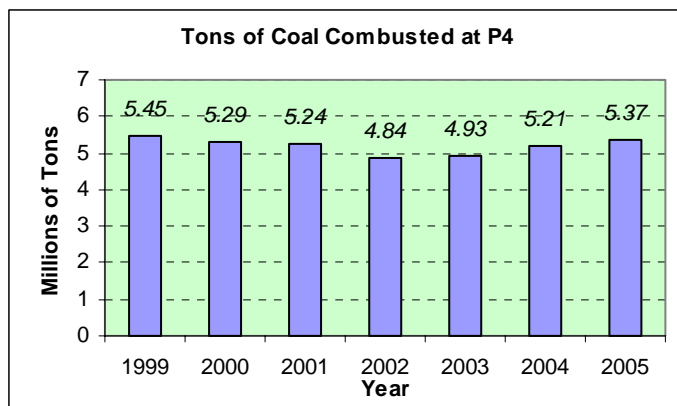
One of the primary objectives of the P4 Environmental Cooperative Agreement is to provide measurable improvements in environmental performance at the plant. The following section provides summary data for the plant in accordance with Section XIV of the Agreement.

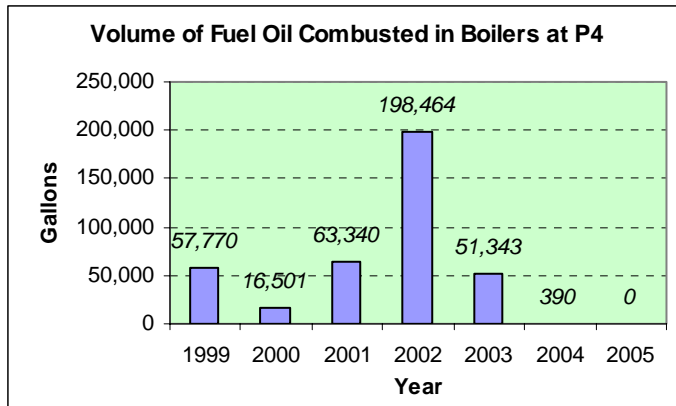
Fuel Use

Pleasant Prairie Power Plant utilizes three fuels: coal, fuel oil, and natural gas. Coal is the primary fuel, while natural gas is utilized during plant start up, for initial flame stabilization when coal is first introduced to the boilers, and during coal mill (i.e. coal pulverizer) starts and stops. The plant also utilizes ash fuel consisting of material recovered from the company's landfills or ash from other plants owned by the company that would otherwise be landfilled.

The total amount of coal combusted at P4 during 2004 and 2005 was higher than the previous two years. This is a reflection of several factors, including a higher demand for energy by our customers and higher availability (and hence utilization) of the plant within the We Energies system. P4 generally exhibits higher operating efficiency and lower production costs than other plants.

The following diagrams illustrate the amount of these three fuels utilized at P4 during the past seven years.



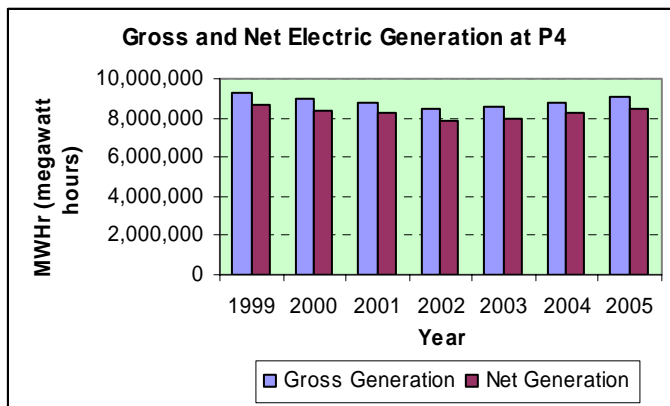


The lower volume of fuel oil usage in 2004 and no usage in 2005 reflects an effort by the company to discontinue reliance on the fuel oil storage system at the plant. Future plans call for the eventual removal of the fuel oil system.⁴ Natural gas usage was lower during 2005 due to a decreased number of boiler start ups, which is when this fuel is most frequently used.

Generation

Total electrical generation by the We Energies' plants, including P4, is a function of economic conditions, customer demand, weather, and the availability of individual generating units.

Overall generation by P4 was higher during 2004 and 2005 than in recent years. Factors contributing to this increase were the increased demand for energy by our customers and the reduced number of both planned and forced outages for maintenance.



Gross generation represents the total amount of electrical energy produced by the plant. The net generation value represents the amount of electrical energy available for transmission to customers after accounting for internal electrical use by the plant (e.g., motors for pumps and fans, power for the electrostatic precipitator, etc.).

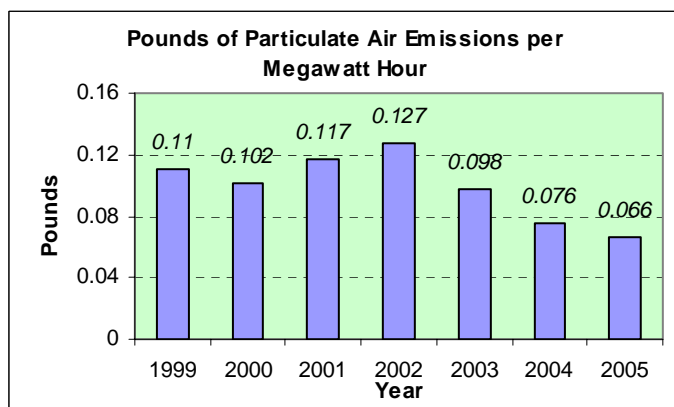
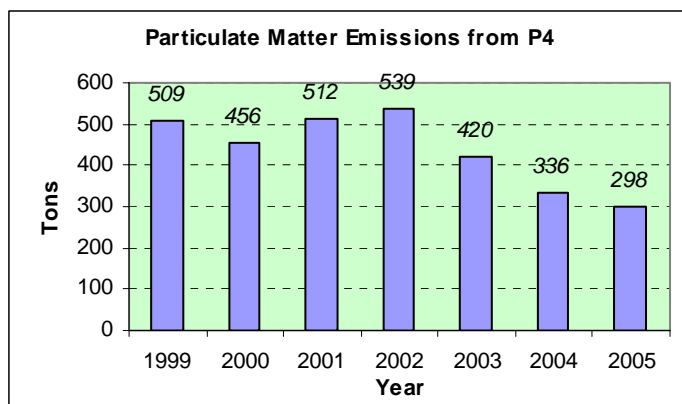
⁴ The high utilization of fuel oil in 2002 was the result of an effort by the plant to reduce the volume of fuel oil in storage in conjunction with routine integrity testing and maintenance of the plant's fuel oil storage system.

The \$325 million Air Quality Control System (AQCS) will reduce the net generation by the plant by an estimated 15-20 megawatts. The addition of the second SCR (selective catalytic reduction) unit and the two FGD (flue gas desulfurization) units will require more energy for pumps, fans and other equipment.

Particulate Matter Air Emissions

Particulate matter air emissions from P4 are a function of the total amount of coal combusted by the plant and the efficiency of the air emission control systems in removing particulate matter. The allowable level of particulate matter emitted by the plant stack is limited by the air quality permit issued by the Wisconsin DNR. The most recent compliance testing performed by We Energies indicates that the plant's average particulate emission rate was approximately 15 percent of the allowable regulatory limit.

Both the total mass and rate of particulate emissions by the plant during the past seven years is illustrated in the figures below. Emissions during the past two full reporting years indicate a decrease in particulate emissions, with the actual emission rate in 2005 approximately 50 percent of the rate in 2002. This may be a reflection of several factors. During 2004 and 2005 there were fewer forced outages. Each outage requires a startup period of several hours during which time the electrostatic precipitator (ESP) efficiency is lower than during normal operating conditions. Improvements made in the ESP control systems earlier in the decade have also improved particulate removal efficiency. Finally, there may be some conditioning of the fly ash in the SCR, reducing the resistivity of the fly ash, and consequently improving the particulate removal efficiency of the ESP.

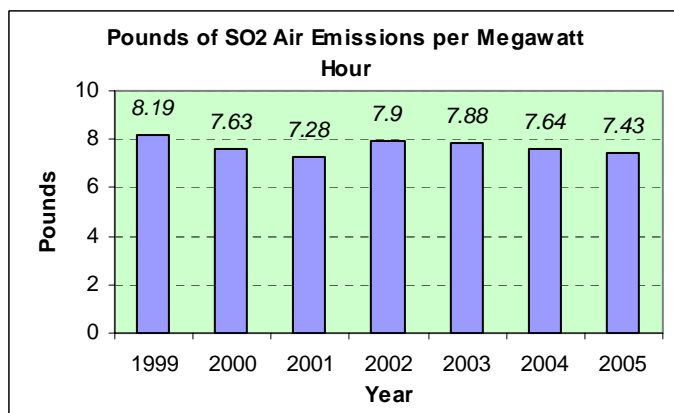
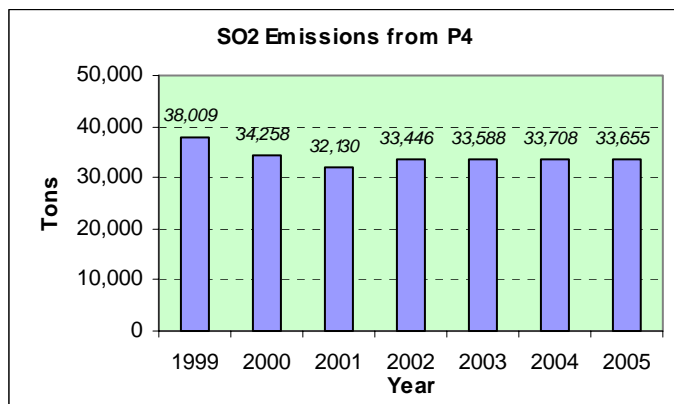


Installation of the FGD systems is expected to further reduce the particulate emissions from the plant. The first system will be operational by the end of 2006.

During 2005 the plant installed new state-of-the-art continuous emission monitors (CEMS) for particulate matter. These were certified during in accordance with U.S. EPA protocol. One benefit of the new monitors is the ability to determine particulate emissions once the flue gas desulfurization (FGD) system is operational. The wet flue gas exiting the FGD system restricts the ability of traditional monitoring systems to provide either a direct or indirect measurement of particulate matter.

Sulfur Dioxide Air Emissions

The rate of sulfur dioxide (SO₂) emissions from P4 is a direct function of the sulfur present in the coal. Total sulfur dioxide emissions are also a function of the volume of coal combusted by the plant. Pleasant Prairie Power Plant burns a low sulfur coal from the Powder River basin in eastern Wyoming. There was a decrease in SO₂ emissions from the plant during 2004 and 2005 as a result of the lower sulfur content in the coal. By contrast, overall coal combustion at the plant increased during these same years. The following graphics illustrate the sulfur dioxide emissions from the plant during the past seven years.



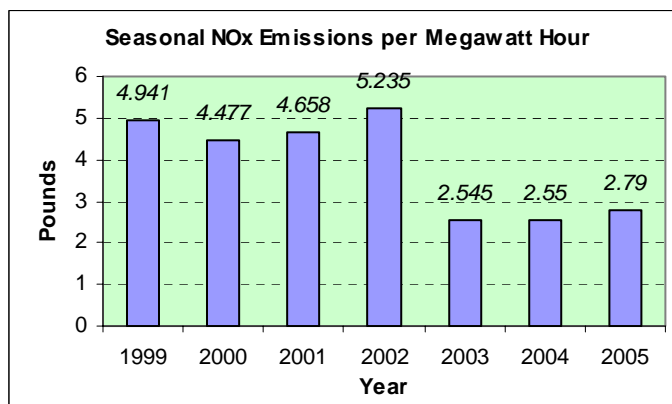
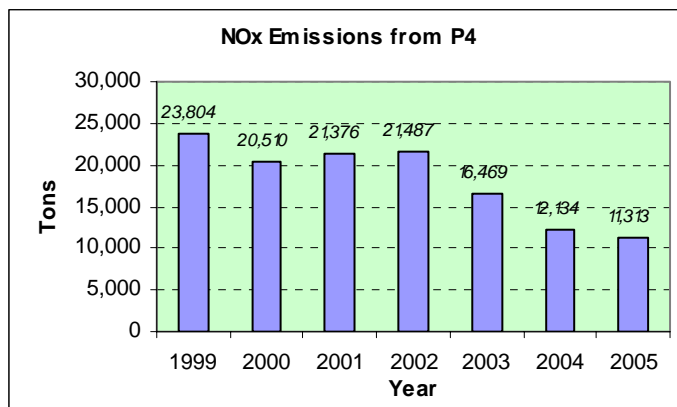
During 2004 and 2005, We Energies continued the construction on two flue gas desulfurization (FGD) units being installed on both Units 1 and 2. This is one component of the \$325 million Air Quality Control Systems (AQCS) project initiated in May 2004. These systems will remove 85-90 percent of the SO₂ in the flue gas. Initial testing and operation of the FGD system on Unit 1 is scheduled for late 2006. The Unit 2 FGD will be operational in 2007.

Nitrogen Oxide Air Emissions

Wisconsin's first selective catalytic reduction (SCR) unit became operational in 2003 on Unit 2 at P4. This \$80 million investment was installed to reduce NOx emissions, and first operation of the SCR occurred during the 2003 summer ozone season. The SCR has had a significant impact on reducing plant NOx emissions beginning in 2003, as is illustrated in the graphs below. Seasonal NOx emissions for the entire plant during the summer ozone season have been reduced by approximately 50 percent.

As indicated by the slight increase in seasonal NOx emission rate (illustrated in the second graph below), there is some deterioration in the SCR catalyst performance over time. Hot boiler gases gradually cause a change in the surface of the vanadium pentoxide catalyst matrix. The SCR initially had two catalyst layers when installed in 2003, and a third catalyst layer was added in 2005. The plant is presently working with suppliers to develop an overall catalyst management strategy that will assure efficient SCR operation over the long term.

A second SCR is currently being installed in Unit 1 and will further reduce NOx emissions from the plant when it is operational in 2007.

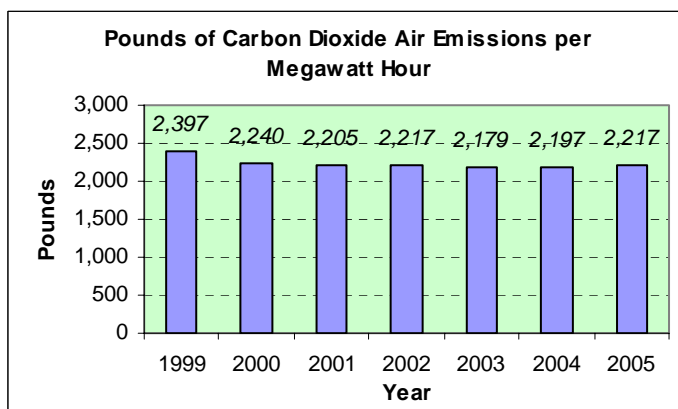
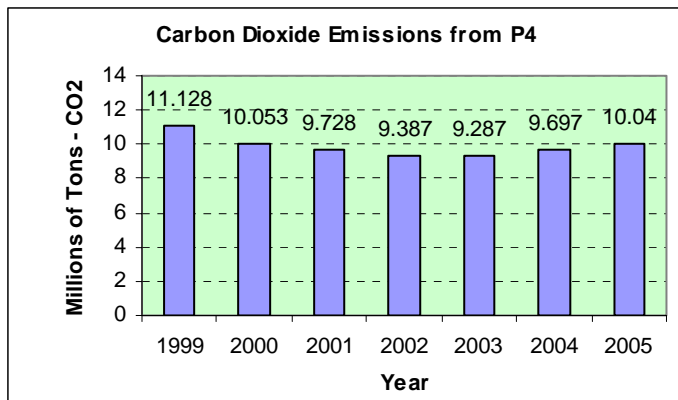


Carbon Dioxide Air Emissions

We Energies' carbon dioxide, or greenhouse gas (GHG) emissions rate (lb/MWH) fluctuates from year to year depending on the demand for electricity by customers, the amounts and types of fuel burned, and the

efficiency of individual generating units. We Energies continually seeks performance improvements that increase power plant generating efficiency at all its fossil fueled plants. However, there are Clean Air Act restrictions that limit the level and type of some improvements that can be made on existing units.

On a system-wide basis, the company is also increasing the amount of renewable energy in its portfolio, thereby reducing the percent of fossil fuel-generated power utilized by electric customers. In June 2005 We Energies purchased the rights to the Blue Sky Green Field wind project to be located in Fond du Lac County. Consisting of approximately 88 wind turbines, this renewable energy project is expected to generate 203 megawatts of electricity, or the amount equivalent to the needs of 45,000 average residential homes. Commercial operation is targeted for 2007 or 2008.

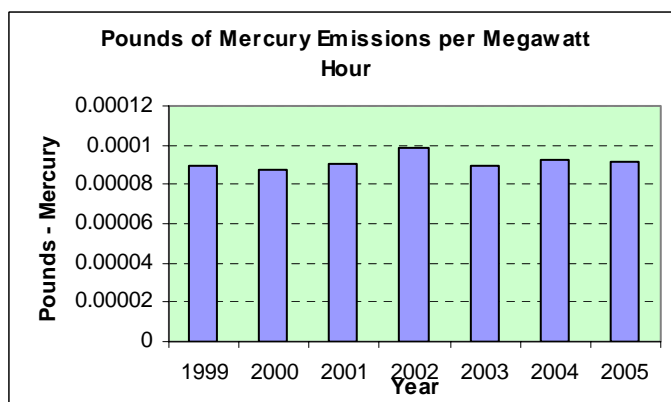
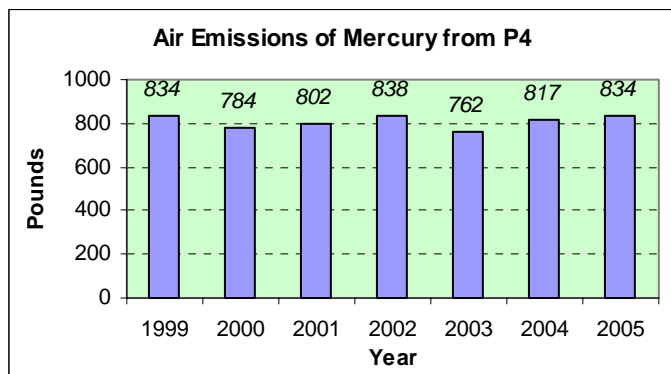


Mercury Air Emissions

Mercury is a trace constituent in coal. Air emissions of mercury from P4 are a function of both the mercury concentration in the coal and the fraction of mercury that is not entrained in the coal combustion products consisting of bottom ash and fly ash. As indicated in the Research section of this report, We Energies is making significant research investments to more accurately measure mercury and to develop new mercury control technologies.

Wisconsin DNR mercury regulations currently apply to P4 and will require emission reductions in the future. However, these state regulations will have to be updated to be consistent with the federal Clean Air Mercury Rule, which requires greater reductions than do the Wisconsin regulations.

The increases in mercury emissions from P4 during 2004 and 2005 reflect variable mercury concentrations present in the coal as well as higher coal combustion at the plant. While there is some minor variability in the mercury content of the Power River Basin coal combusted by the plant, total mercury emissions are currently most influenced by the total amount of coal combusted.



Operation of the FGD system to reduce SO₂ emissions may also have an effect on mercury emissions. It is estimated that the FGD may remove approximately 180 pounds of mercury from the flue gases that would otherwise be emitted to the atmosphere. The actual level of removal will be dependent on the chemical state of the mercury in the flue gas. Of this, an estimated 0.3 pounds of mercury may be discharged annually to Lake Michigan from the wastewater treatment system being installed to support the FGD system. We Energies is currently working with the DNR and U.S. EPA in a wastewater permit modification that will allow for this minor increase in wastewater discharge.

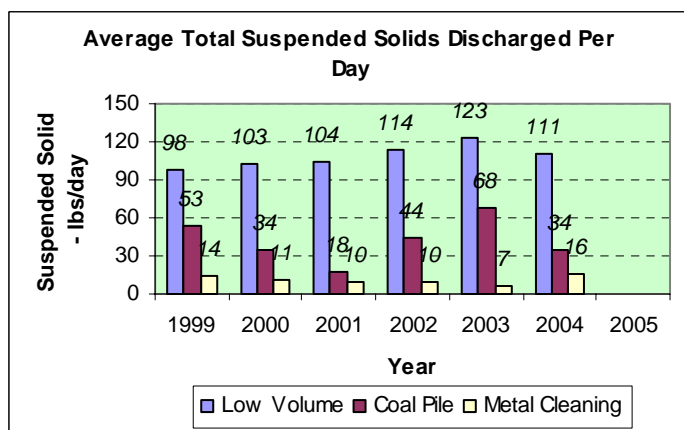
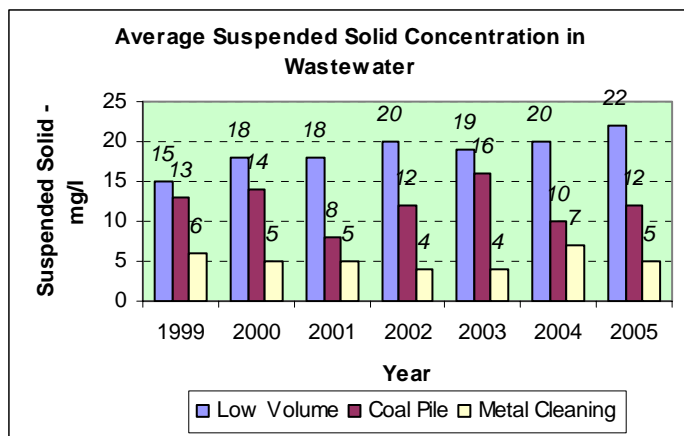
The plant is currently installing and certifying state-of-the-art continuous emission monitors (CEMS) for mercury. These monitors will provide real-time data on mercury emissions, including any changes in emission rates that may result from the operation of the FGD systems.

Total Suspended Solids in Waste Water Discharges

Due to the large quantities of coal and ash products handled by the plant, there is the potential for suspended solids to be present in wastewater and stormwater runoff from the plant. Consequently, the plant's wastewater discharge permit requires that the plant treat wastewaters, and that the treated wastewaters discharged from the plant be maintained within certain limits. In order to minimize the discharge of suspended solids, the low volume, metal cleaning, and coal pile runoff basins are used to promote the initial settling out of these fine grain materials. This settling process is followed by treatment

in the plant's wastewater clarifier system that uses flocculents to aggregate and further remove suspended solids.

The plant's wastewater permit limits total suspended solids concentrations to 100 mg/l (milligrams per liter) on a daily basis and 30 mg/l on a monthly average basis in the effluent from both the low volume and metal cleaning wastewater basins. The permit limits total suspended solids concentrations to 50 mg/l in the effluent from the coal pile runoff basin. The following diagrams illustrate average suspended solids concentrations and mass discharge from the three basins regulated by the wastewater permit. Average suspended solids concentrations are significantly below the levels allowed in the wastewater permit issued by the DNR.



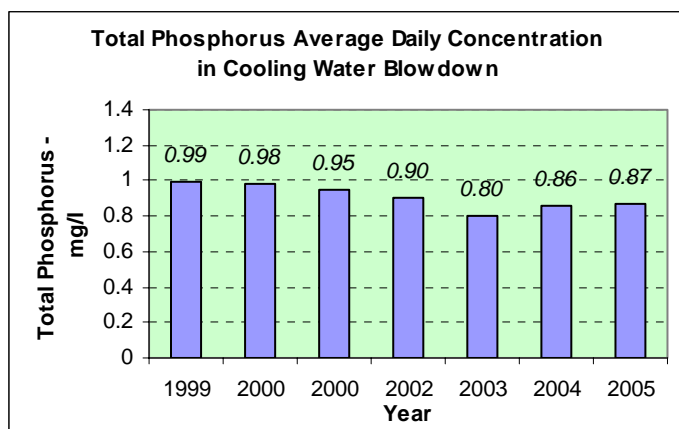
The slight increase in suspended solids in the low volume basin probably reflects the increased coal and ash handling within the plant that occurring during 2004 and 2005. The lack of 2005 values for the total suspended solids per day reflects a change in the reporting requirements associated with the wastewater discharge permit that was approved by the DNR in 2004. This data is no longer calculated or reported to the agency under the terms of the revised permit.

Total Phosphorus in Water Discharges

The largest single water discharge from P4 is the cooling water blowdown from the two mechanical draft cooling towers located north of the power plant building. Most of the water pumped from Lake Michigan is routed to the cooling water system. Chemical additives are mixed with the cooling water to prevent the

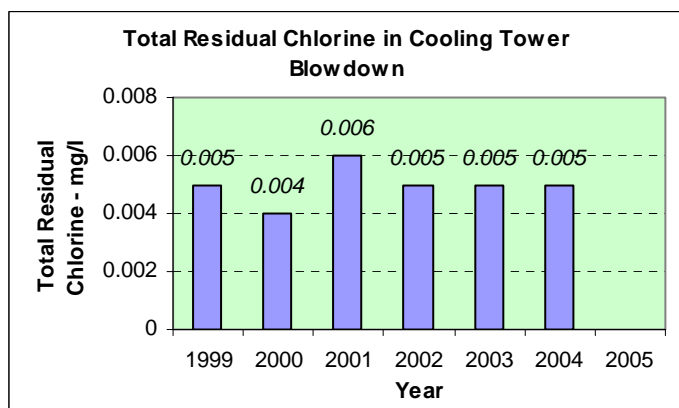
growth of algae and other organisms, as well as to prevent corrosion within the plant's cooling system. These additives may include both phosphorus and chlorine. To prevent the build-up of dissolved solids in the cooling water, a fraction of the cooling water (or cooling tower blowdown) is routed back to Lake Michigan. Two parameters of special interest in this cooling water blowdown are phosphorus and residual chlorine.

The graph below illustrates the phosphorus concentration in the cooling water blowdown. A significant portion of the phosphorus concentration in the discharge reflects the background level of phosphorus present in the water when it is withdrawn from Lake Michigan. The process of utilizing the water in the cooling towers (i.e. evaporation) also concentrates this nutrient. The plant was in compliance with the phosphorus limit throughout both 2004 and 2005.



Total Residual Chlorine in Water Discharges

Chlorination of the plant cooling waters is necessary to limit the growth of algae and other biological activity that can limit the thermal efficiency of the cooling towers, and consequently the plant's overall efficiency. The plant's wastewater discharge permit limits the concentration of residual chlorine in the cooling water blowdown discharged to Lake Michigan. The following graph illustrates the residual chlorine content in the cooling water blowdown. The plant was in compliance with this limit throughout 2004. The lack of graphical data for 2005 reflects a change in the reporting requirements of the plant's wastewater discharge permit. Total residual chlorine concentrations less than 0.05 mg/l are no longer required to be reported to the Department of Natural Resources.

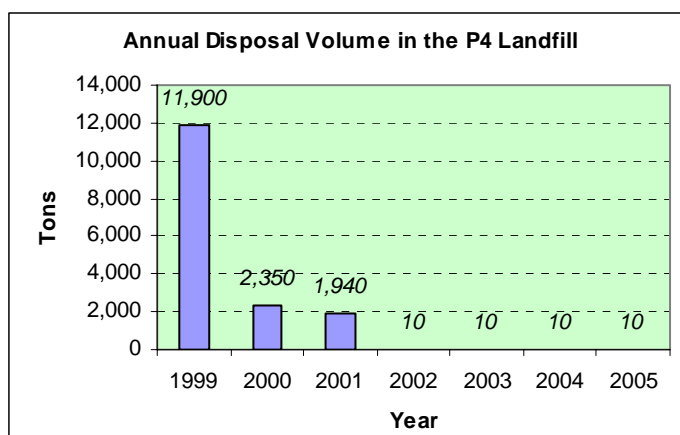


Beneficial Use of Coal Combustion Products

We Energies maintains a voluntary goal of beneficially utilizing 100 percent of the coal combustion products (i.e., fly ash and bottom ash) produced at P4 in an effort to minimize the landfilling of these materials. In 2004 and 2005, 100 percent of these materials were utilized with over 70 percent of the fly ash produced at P4 used in the manufacture of concrete and concrete products. In this use, the fly ash replaces the need for some of the Portland cement in the concrete. The remaining fly ash produced was used as a waste stabilization product and as sub-base stabilizing soft soils under paved parking lots and roads. Nearly 100 percent of the bottom ash produced in 2004 and 2005 was used as a base material under concrete slabs and pavement. The bottom ash replaces the need for sand and gravel at construction sites.

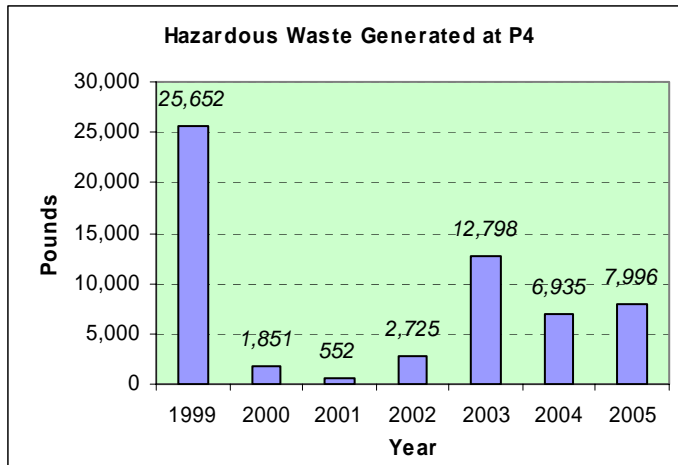
Ash Disposal Volumes in Landfills

One of the positive results of the beneficial use of P4's coal combustion products is the decreased need for landfilling these materials. As illustrated in the following graphic, the total amount of material placed in the landfill decreased significantly starting 2002. During 2004 and 2005 the only material placed in the landfill were de minimis amounts of ash and sludge material that can not be used beneficially. During the past four years this has averaged approximately ten tons per year.



Hazardous Waste Generation

A key pollution prevention goal of the plant is to minimize the production of hazardous waste that must be shipped off site for treatment or disposal. The plant continues to seek opportunities to reduce, reuse or recycle material, thus avoiding the generation of all types of solid waste, including that characterized as hazardous. However, due to the \$325 million AQCS construction project, there has been an increased generation of waste paint material removed from plant surfaces, used solvents and other materials. During 2004 and 2005, primary hazardous wastes included lead paint debris, waste solvents resulting from the construction of the fiberglass chimney liner, and other coatings and solvents associated with maintenance and construction activities. We Energies and plant staff continue to work with project contractors to establish and follow pollution prevention practices.



Toxic Release Inventory (TRI) Releases

The Toxics Release Inventory (TRI) was created by the EPA to help communities encourage industries to voluntarily reduce those emissions designated by the agency as “toxic” substances. Created as part of the Emergency Planning and Community Right-to-Know Act of 1986 and administered by the EPA, the TRI is a public record of the release and transfer of designated chemicals by private companies and government facilities.

We Energies annually reports to the EPA the TRI emissions by P4 to land, air and water. Detailed TRI data for P4 (and other We Energies power plants) is published on the internet at www.we-energies.com/environment/tri.

Material Recycling

Pleasant Prairie Power Plant staff collect and recycle several materials, including the following:

- Paper and cardboard
- Pallets
- Used oil
- Used oil filters
- Electronic equipment
- Scrap metal
- Lights
- Batteries
- Antifreeze
- Aluminum, plastic and glass containers

The total volume of recyclable material generated by the plant is dependent in part on outage and construction projects, including the activities and practices of contractors and suppliers. Similarly, scrap metal production increases with construction projects.

REGULATORY FLEXIBILITY

Section XII of the P4 Cooperative Agreement provides a mechanism for We Energies and the DNR to exercise certain operational flexibility and streamlining in recognition of annual reviews and reporting, implementation of environmental management systems and other commitments of the agreement.

Permit Streamlining

We Energies utilized this provision once during 2002 and once in 2003. This provision was not utilized in 2004 or 2005.

Streamlined Data Collection and Reporting

We Energies staff continue to utilize several provisions of the Cooperative Agreement that allow for streamlined data collection and reporting at P4. These include the following.

- Electrostatic precipitator monitoring and data collection, combined with enhanced corrective action
- Instrument calibration based on good engineering practices
- Baghouse collector data inspection and data collection
- Semi-annual excess emission reporting.

Due to a change in the wastewater discharge permit renewed in 2004, the annual wastewater discharge monitoring reports were discontinued and the plant returned to preparing and submitting monthly discharge monitoring reports. This annual reporting provision in the original 2001 Environmental Cooperative Agreement was eliminated in the 2006 renewed Agreement.

ASH FUEL REBURN AND BENEFICIAL USE

We Energies continues to utilize two patented processes that allow the company to recover energy from ash that would otherwise be managed as a waste. One patent (U.S. Patent # 5,992,336) allows bottom ash and fly ash with a high loss on ignition to be reburned in a pulverized coal furnace such as those at P4.⁵ The other patent (U.S. Patent # 6,637,354) allows the company to identify and recover ash products from a previously used disposal site, and where possible, reburn this ash for energy recovery. These processes are utilized at P4 and provide several environmental benefits. These benefits, based on data through the end of 2005, are outlined below.

Total Ash Reburned	487,000 tons
Avoided Coal Use	198,000 tons, or 1,700 rail cars
Avoided Landfill Space	406,000 cubic yards
Potential Avoided CO ₂ Emissions	276,000 tons
Fly Ash Produced for Beneficial Use	236,000 tons

OUTREACH

We Energies continued to provide information and seek feedback from residents of Pleasant Prairie and other interested stakeholders during 2004 and 2005. Approximately 70 individuals and groups are provided periodic updates on the plant's activities and environmental performance. To provide information and to stimulate feedback, P4 staff have taken several actions during 2003 and 2004, including:

⁵ High loss on ignition levels in ash indicate that unburned carbon (i.e., energy) is still present in the ash.

- Plant information sessions and tours, including an open house in April 2004 highlighting the planned construction of the \$325 million AQCS project (see the Emissions section above);
- Periodic informational mailings; and,
- Focused outreach to targeted community, governmental and professional groups.

Participation by local residents and other stakeholders continues to be very low. An example was the participation by a total of only three individuals at two stakeholder sessions conducted in late 2005.

The plant continued its long history of providing educational tours to local schools and universities. During the reporting period the plant hosted visits and tours for 35 educational groups, including:

- Waterford High School
- Lakeville Tech High School
- Libertyville (IL) High School
- McHenry (IL) High School
- Gateway Technical College
- Carthage College
- Marquette University
- Plus numerous middle and elementary schools.

Several Boy Scout troops also visited the plant. We Energies routinely sponsors activities that lead to Scouts earning one or more of their merit badges, including that for electricity.

To promote an understanding of the plant's activities to a broader array of stakeholders, the plant sought to host other groups outside of the Pleasant Prairie community. Two activities of note included the following:

- **Green & Growing Tour** – In October 2005 P4 was a host site as part of the Green and Growing tour sponsored by the Wisconsin Environmental Initiative and the Lafollette Institute. Seeking to highlight high environmental performance facilities in Wisconsin, participants in this activity were provided information and a tour of the plant and the construction associated with the AQCS project.
- **EPA New Employee Training** – Approximately 20 recently hired U.S. EPA employees from the Chicago Region V office visited the plant in November 2005. As part of an overall orientation activity, they were presented a 2-hour environmental training course that is also provided to plant employees. This was followed by a tour of the plant (as illustrated below). Several Wisconsin DNR employees also participated in this activity.

In addition to the formal community outreach commitments within the Cooperative Agreement, the P4 staff continued a long tradition of reaching out to the local community through fund raising, collection of gifts and other activities, including:

- Two blood drives
- Gift collection for military personnel serving in Iraq
- Daffodil sale for the American Cancer Society
- Food drive for the Shalom Center
- School supply drive
- Christmas gift collection for needy children through the Shalom Center.



Recently hired employees from the U.S. EPA tour P4 during November 2005.

ADMINISTRATIVE SAVINGS

Measurable administrative savings are one goal of the P4 Environmental Cooperative Agreement. The primary source of these savings is flexibility in monitoring and reporting. We Energies continues to utilize the flexibility of some streamlined monitoring and reporting allowed by the Agreement. This is primarily realized in the area of air monitoring and reporting. The streamlined reporting under the wastewater permit is no longer applicable due to permit changes.

As noted previously in this report, the company did not utilize the construction permit streamlining during the 2004 and 2005 reporting period.

PROGRESS ON OTHER COMMITMENTS

The P4 Environmental Cooperative Agreement included several environmental commitments related to superior environmental performance and progress on these commitments is to be included in performance reports. The following table provides a summary of We Energies' performance on these commitments.

Coal displaced by recovered ash	<p>Pleasant Prairie Power Plant continued to burn as a fuel, high-carbon fly and bottom ash from the Milwaukee County and Valley Power Plants, as well as material that was previously stockpiled. In 2004 and 2005, the plant reburned more than 179,500 tons of ash from other plants.</p> <p>During 2004 and 2005, the reburning of this ash fuel avoided the purchase of 570 rail car loads of coal, or approximately 66,000 tons of purchased fuel.⁶</p>
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⁶ A more comprehensive discussion on We Energies' recovery and recycling of material is presented in the corporate performance report at www.wec-performancereport.com.

Saved or recovered landfill space	The ash reburn process at P4 saved the equivalent of 149,000 cubic yards of landfill space in Wisconsin during 2004 and 2005. This amount of space would have been required had the high-carbon ash from other power plants not been burned at P4.
Coal ash recovery from landfills for beneficial use	During 2004 and 2005, We Energies recovered 12,000 tons of coal ash from the P4 landfill and sold it as a base material to replace sand, stone and gravel under roads, parking lots and buildings. This conserves natural resources such as sand, gravel and stone that would otherwise be mined and transported from other locations.
Progress on the environmental management information system (EMIS)	Utilization of the environmental management information system (EMIS) continued at P4, with air, water and solid waste permit information maintained this system. This information includes all tasks and activities associated with routine monitoring, recordkeeping, and reporting.
Supplier audits	We Energies continues to perform periodic audits of key suppliers of environmental services (e.g., management of used oil, lighting materials, solid and hazardous waste, antifreeze, etc.). Approximately 30 suppliers are examined on a periodic schedule depending on the type of service provided. The ISO 14001 voluntary environmental management system standard is used as the protocol for conducting these audits.
Semi-annual monitoring reports and excess emission summaries	Semi-annual monitoring and excess emission reports are provided to the DNR and EPA under separate cover in accordance to the schedule outlined in the cooperative agreement.
Annual discharge monitoring summary report	An annual wastewater discharge monitoring summary report was provided to the DNR for 2004. However, due to changes in the plant's wastewater discharge permit renewed in 2004, the plant resumed the preparation and submittal of monthly discharge monitoring reports to the DNR. Consequently, the administrative savings realized by annual reporting no longer exist.
Wastewater notifications	The plant is required to notify the DNR and take corrective and preventive action whenever there is a temporary exceedance of the parameters outlined in the plant's wastewater discharge permit. During 2004, the plant reported one day when the residual chlorination level exceeded the permit limit, and during 2005 the plant reported two days when the total suspended solids were above the limits outlined in the wastewater permit. Immediate corrective and long-term preventive actions were taken in all three instances.

Construction related to plant emission sources	<p>In May 2004, the plant initiated construction on a \$325 million Air Quality Control System project that includes installation of:</p> <ul style="list-style-type: none"> • A SCR on Unit 1 to reduce NO_x emissions • Two wet flue gas desulfurization units (FGD) systems, one each on Units 1 and 2. <p>The Unit 1 SCR and FGD will be tied into the plant during an extended maintenance outage in late 2006, and these systems are expected to be fully operational in 2007.</p> <p>This project required the removal of some existing warehouses and other structures (eventually to include the plant stack) east of the main plant. Construction of a new stack was completed in the third quarter of 2004, although it is not yet in service.</p>
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Additional Information

Additional information regarding the environmental performance of Pleasant Prairie Power Plant can be obtained by contacting:

Ed Morris
Plant Environmental Coordinator
(262) 947-5625
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or

John Shenot
Wisconsin Department of Natural Resources
(608) 267-3125
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DATA APPENDIX

Energy Use

Tons of Coal Combusted at P4 tons		
1999		5,450,195
2000		5,294,942
2001		5,237,028
2002		4,843,593
2003		4,931,428
2004		5,205,471
2005		5,373,962

Volume of Natural Gas Combusted at P4 cubic feet x 1,000		
1999		227,001
2000		237,968
2001		131,748
2002		225,902
2003		216,346
2004		204,090
2005		136,132

Volume of Fuel Oil Combusted at P4 Gallons		
1999		57,770
2000		16,501
2001		63,340
2002		198,464
2003		51,343
2004		390
2005		0

Gross Generation

Gross and Net Electric Generation at P4 megawatt hours			
	<i>Gross</i>		<i>Net</i>
1999	9,282,529		8,709,608
2000	8,974,819		8,398,877
2001	8,820,773		8,234,709
2002	8,469,446		7,898,580
2003	8,524,651		7,935,513
2004	8,825,196		8,250,715
2005	9,055,935		8,459,992

Particulate Matter Emissions

Particulate Matter Emissions from P4 Tons	
1999	509
2000	456
2001	512
2002	539
2003	420
2004	336
2005	296

Pounds of Particulate Air Emissions per Megawatt Hour Pounds	
1999	0.110
2000	0.102
2001	0.117
2002	0.127
2003	0.098
2004	0.076
2005	0.066

Sulfur Dioxide Emissions

SO2 Emissions from P4 Tons	
1999	38,009
2000	34,258
2001	32,130
2002	33,446
2003	33,588
2004	33,708
2005	33,655

Pounds of SO2 Air Emissions per Megawatt Hour pounds per megawatt hour	
1999	8.18
2000	7.63
2001	7.28
2002	7.90
2003	7.88
2004	7.64
2005	7.43

Nitrogen Oxide Emissions

NOx Emissions from P4 Tons	
1999	23,687
2000	20,871
2001	21,376
2002	21,487
2003	16,469
2004	12,134
2005	11,313

Seasonal Nitrogen Oxide Emissions

Seasonal NOx Emissions per Megawatt Hour pounds per megawatt hour	
1999	4.941
2000	4.477
2001	4.658
2002	5.235
2003	2.545
2004	2.55
2005	2.79

Carbon Dioxide

Carbon Dioxide Emissions from P4 millions of tons	
1999	11.128
2000	10.053
2001	9.728
2002	9.387
2003	9.287
2004	9.697
2005	10.04

Pounds of Carbon Dioxide Emissions per Megawatt Hour Pounds	
1999	2,397
2000	2,240
2001	2,205
2002	2,217
2003	2,179
2004	2,197
2005	2,217

Mercury Emissions

Air Emissions of Mercury from P4 pounds	
1999	834
2000	784
2001	802
2002	838
2003	762
2004	817
2005	834

Pounds of Mercury Air Emissions per Megawatt Hour Pounds	
1999	0.0000895
2000	0.0000874
2001	0.0000910
2002	0.0000990
2003	0.0000890
2004	0.0000930
2005	0.0000920

Wastewater Discharges

Average Total Suspended Solids Concentration in Wastewater Discharge mg/l			
	<i>Low Volume</i>	<i>Coal Pile</i>	<i>Metal Cleaning</i>
1999	15	13	8
2000	18	14	5
2001	18	8	5
2002	20	12	4
2003	19	16	4
2004	20	10	7
2005	22	12	5

Average Total Suspended Solids Discharged per Day lbs/day			
	<i>Low Volume</i>	<i>Coal Pile</i>	<i>Metal Cleaning</i>
1999	98	53	14
2000	103	34	11
2001	104	18	10
2002	114	44	10
2003	123	68	7
2004	111	34	16
2005	Not required to be reported		

Total Phosphorus Average Daily Concentration in Cooling Water Blowdown mg/l	
1999	0.99
2000	0.98
2001	0.95
2002	0.90
2003	0.80
2004	0.86
2005	0.87

Total Residual Chlorine in Cooling Tower Blowdown mg/l	
1999	0.005
2000	0.004
2001	0.006
2002	0.005
2003	0.005
2004	0.005
2005	0.005

Coal Combustion Product Utilization

Coal Combustion Product Utilization tons	
1999	268,000
2000	261,000
2001	287,000
2002	288,000
2003	282,000
2004	288,000
2005	325,000

Solid Waste

Annual Disposal Volumes in the P4 Landfill tons	
1999	11,900
2000	2,350
2001	1,940
2002	10
2003	10
2004	10
2005	10

Hazardous Waste Generated at P4	
pounds	
1999	25,652
2000	1,851
2001	552
2002	2,725
2003	12,798
2004	6,935
2005	7,996